

# Community for Data Integration June Monthly Meeting

June 9, 2021

Leslie Hsu, Amanda Liford, Grace Donovan  
CDI Facilitators

Join at  
**slido.com**  
**#CDIJUN**



# Why CDI?

Many different  
arenas,  
but all trying to  
build “next gen”  
USGS

One feels they  
can ask any  
question

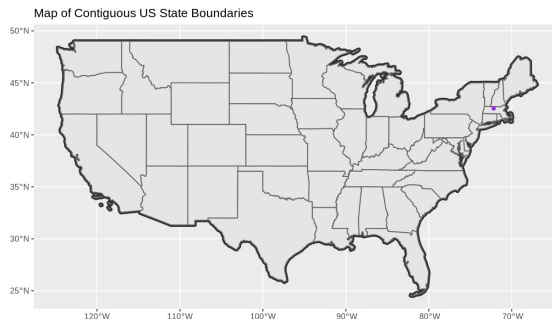
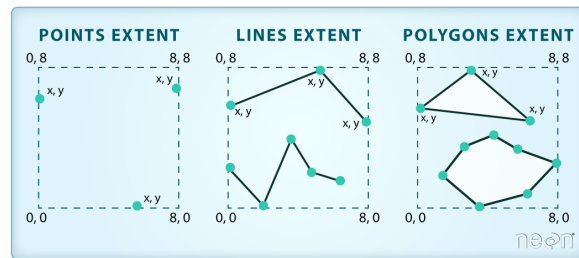
Data Viz,  
more please

# Data Carpentry – Geospatial with R

July 27-28, 2021

more info at

<https://my.usgs.gov/confluence/x/tpVsKQ>



# Community for Data Integration

## June Monthly Meeting

June 9, 2021

Kevin T. Gallagher, Associate Director for Core Science Systems

Tim Quinn, Associate Chief Information Officer

# Designing Data-Intensive Science

- **Thank you** to the community
- Lessons from a large, all-virtual event
- Help us continue the discussion

## Questions from the community:

*In terms of the outcomes of the workshops, what are your thoughts on goals about how to better communicate data science products?*

## Questions from the community:

*As USGS increasingly produces more big-data science, is the agency looking at its own carbon emission footprint for the data centers, making it sustainable?*

## Questions from the community:

*In what ways will the USGS adjust to maintain its rigorous science practices under the pressure of quickly providing actionable science?*



## Questions from the community:

*Can we get an overview of the organizational structure of ACIO, CHS, EROS and CSS? CHS has been seen as its own thing. How are these players organized?*

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*OACIO: Office of the Associate Chief Information Officer*

*CHS: Cloud Hosting Solutions*

*EROS: Earth Resources Observation and Science*

*CSS: Core Science Systems*

# Today's presentations

Building a framework to compute  
continuous grids of basin characteristics  
for the conterminous United States

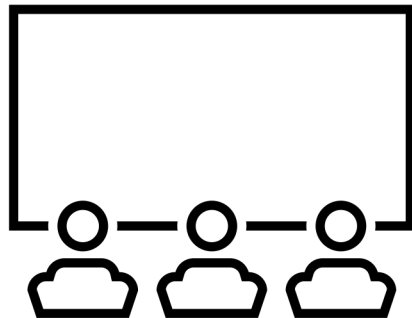
*Theodore Barnhart, USGS*

Using machine learning to map  
topographic-soil & densely-patterned sub-  
surface agricultural drainage (tile drains)  
from satellite imagery

*Tanja Williamson, USGS*

Enabling AI for citizen science in fish  
ecology

*Nathaniel Hitt, USGS*



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# What's Happening Around the CDI

For more information on any of the collaboration areas, see  
<https://my.usgs.gov/confluence/x/yhv1l>

## June 2021 – Imagery Collab. Area

### Group Contacts:

Frank Engel [fengel@usgs.gov](mailto:fengel@usgs.gov)

Cian Dawson [cbdawson@usgs.gov](mailto:cbdawson@usgs.gov)

## Upcoming Imagery Collaboration Stakeholder Focus Group

**Date/Time:** June 18, 12pm central

**Purpose:** NWIS Imagery Data Storage & Persistence Project stakeholder brainstorming and listening session to source ideas about what's sorts of things folks want an edge / IoT sensor focused on imagery to do. Information will be used to inform Project Planning.

**Audience:** Primary audience is Water enterprise personnel using cameras located at USGS gages that want to explore or investigate quantitative processing on imagery. Other potential audience include USGS scientists interested in edge-computing or IoT sensor technology. Example use cases we are considering (but aren't limited to) include: automated processing of camera extrinsics (pose, 3D rectification, measuring objects in view of cameras), automated processing of video to derive motion (especially water velocity), and automated PII identification.

### Other announcements:

- [Link to recording](#) of the Online Imagery Data Storage Session. Also, a [view only link to the Mural breakout sessions](#) discussing Imagery ideas, needs and priorities.

June 2021 –  
**Semantic Web  
Working Group**

Group Contact:  
Fran Lightsom  
[flightsom@usgs.gov](mailto:flightsom@usgs.gov)

Next event:

- **Wrap-up of Semantic Web 101 session at the CDI workshop: What did we learn? What do we want to do next – training? Projects?**

Thursday, June 10, noon Denver time

June 2021 –  
**Metadata Reviewers  
Community of  
Practice**

Group Contact:  
Fran Lightsom  
[flightsom@usgs.gov](mailto:flightsom@usgs.gov)

Our primary purpose is to discuss challenges that we encounter in reviewing metadata for USGS data releases.

At our June meeting we also discussed

- Consistent placement of disclaimers in metadata records.
- Actions repositories can take to improve use of USGS thesaurus terms as keywords.

June 2021 –  
**Geomorphology  
Focus Group**

Group Contact:  
Jess LeRoy [jleroy@usgs.gov](mailto:jleroy@usgs.gov)

**Upcoming Geomorphology Seminar**

Title: Elevation Derived Hydrography

Date/Time: June 22, 12pm central

Speaker: Silvia Terziotti and Christy-Ann Archuleta

**Other announcements:**

- [Link to recording of April 27, 2021 seminar](#) (Speaker: Adam Benthem; Title: Comparing specific gage analysis and aerial image analysis to evaluate climate driven channel change in New England)



## June 2021 – Usability

Group Contact:  
Sophie Hou

chungyihou@contractor.usgs.gov

### Events:

- **Next Office Hour session:** June 16, 2021, at 3pm ET/1pm MT
  - User Needs/Requirements Analysis and Definitions demo: Mapping Techniques (e.g., empathy mapping and journey mapping)
- **April 2, 2021**
  - User needs/requirements analysis and definition overview
- **May 19, 2021**
  - Colors and Usability
- **Get in touch if you:**
  - Have a tool/an application that you would like to get usability feedback
  - Would like to discuss any specific usability issues/techniques
- Join Listserv via: <https://listserv.usgs.gov/mailman/listinfo/cdi-usability>
- Post to the collaboration area's forum at: <https://my.usgs.gov/confluence/x/yZCpJg>
- Add a message to USGS CDI "Usability Topics - Office Hours" Teams Channel
- Email Sophie

June 2021 –  
**Risk Community  
of Practice**

Group Contacts:  
Kris Ludwig, Dave Ramsey,  
Emily Brooks

[riskyworld@usgs.gov](mailto:riskyworld@usgs.gov)

[Risk Community of Practice  
Wiki](#)

## Upcoming Events

### **June 17@ 1p ET – Hazards, Race, and Social Justice Speaker Series / Risk CoP Monthly meeting**

- In Not So Plain Sight: Untangling the Roots of Hazard Vulnerability -- Kathleen Tierney, University of Colorado

**Save the Dates! Annual Meeting Aug 17-19, 2021**  
*(virtual) 12-5p ET*

### **Join us!**

Join the Risk CoP listserv to receive our monthly newsletter! <https://listserv.usgs.gov/mailman/listinfo/cdi-risk>

**June 2021**

**Tech Stack Working Group**

**ESIP IT&I Program Committee**

**Group Contacts:**

Derek Masaki  
dmasaki@usgs.gov

Tom Sohre  
tsohre@usgs.gov

**Past Event :**

**May13 2021** Visualization of Landsat Data stored in the Cloud using LandsatLook 2.0

**Presenter(s)** Kristi Kline and Kelli Lemig from the USGS Earth Resources Observation and Science (EROS) Center

**Link to Presentation Recordings:**

[Interoperability and Technology/Tech Dive Webinar Series - Federation of Earth Science Information Partners \(esipfed.org\)](https://www.esipfed.org/webinars/interoperability-and-technology-tech-dive-webinar-series-federation-of-earth-science-information-partners-esipfed-org)

**Next Event :**

**3pm EDT Thu Jun10** USGS Hydro Network Linked Data Index Tools

**Presenter(s)** Dave Blodgett USGS Integrated Modeling and Prediction WMA; Anders Hopkins USGS Contractor; Taher Chegini USGS Contractor

**Virtual Meeting Link:**

<https://us02web.zoom.us/j/81907776438?pwd=L2VWY1hBOEdROTINODUxanZ4T1FhZz09>

**Meeting ID: 819 0777 6438**

**Passcode: 507948**

June 2021

## DevOps Working Group

### Group Contacts:

Derek Masaki  
dmasaki@usgs.gov

David Hughes  
drhughes@usgs.gov

### Next Event(s):

**August Event**  
**11am EDT Aug 3 2021**

#### RedHat OpenShift

**Red Hat OpenShift** is an open source container application platform based on the Kubernetes container orchestrator for enterprise app development and deployment in the hybrid cloud

Presenter(s): RedHat Federal Team

**October Event**  
**11am EDT Oct5 2021**

#### ESRI ArcGIS Enterprise Kubernetes Platform

**ArcGIS Enterprise** on **Kubernetes** is a new deployment option for **ArcGIS Enterprise** mapping and analytics software. It uses microservices and containerization to provide a cloud-native architecture, running either on your organization's **Kubernetes** platform or in your cloud provider's **Kubernetes** service.

Presenter(s): ESRI ArcGIS Kubernetes Team

June 2021 –  
**Data Management  
Working Group**

Group Contacts:

Madison Langseth -  
[mlangseth@usgs.gov](mailto:mlangseth@usgs.gov)

Tara Bell –  
[tbell@usgs.gov](mailto:tbell@usgs.gov)

**Next events: Monday, June 14, 2021**

- Data Release and Section 508 Compliance
  - [https://my.usgs.gov/confluence/display/cdi/DMWG+Meeting+2021\\_06\\_14](https://my.usgs.gov/confluence/display/cdi/DMWG+Meeting+2021_06_14)

**Past event: CDI Workshop Breakout Sessions**

- How to talk to your data manager/scientist – Breaking the ice
- Assessing the Value and Usage of USGS Data Management Plans

June 2021 –  
**Data Viz**

Group Contact:  
Colleen Nell  
[cnell@usgs.gov](mailto:cnell@usgs.gov)

## Upcoming webinars:

**July 8th @ 2-3 pm EST** *invite coming soon!*

Mike Freeman <http://mfviz.com/>

Observable as a platform for data exploration  
+ visualization with USGS data

**Sept 16th, time TBD**

Cédric Scherer <https://www.cedricscherer.com/>

Tricks and secrets for beautiful plots in R

June 2021 –  
**eDNA Community of  
Practice**

Group Contacts:  
Jason Ferrante  
[jferrante@usgs.gov](mailto:jferrante@usgs.gov)

Damian Menning  
[dmenning@usgs.gov](mailto:dmenning@usgs.gov)

Chris Merkes  
[cmerkes@usgs.gov](mailto:cmerkes@usgs.gov)

**We are working on a "How-to video" for using our site (the use of Forums) and exploring the new functionality of MS apps in Teams and online to make our site more accessible.**

**Suggestions are welcome!**

June 2021 –  
ETWG Inland/Coastal  
Bathymetry

Group Contacts:  
Phil Rufe [prufe@usgs.gov](mailto:prufe@usgs.gov)

Next event:

June Monthly Bathymetry Research Coordination Meeting – 29 June at 10:00 am central time

Microsoft Teams meeting

**Join on your computer or mobile app**

[Click here to join the meeting](#)

Past event:

May Monthly Bathymetry Research Coordination Meeting – 24 May 2021. [NOTES](#)